

**THE ALTERNATING-CURRENT
CIRCUIT: AN INTRODUCTORY
AND NON-MATHEMATICAL
BOOK
FOR ENGINEERS AND STUDENTS**

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The Alternating-Current Circuit: An Introductory and Non-mathematical Book for Engineers and Students by W. Perren Maycock

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W. PERREN MAYCOCK

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AN INTRODUCTORY AND NON-MATHEMATICAL BOOK
FOR ENGINEERS AND STUDENTS.

BY

W. PERREN MAYCOCK, M.I.E.E.

*WITH 51 ILLUSTRATIONS, INDEX, AND
RULED PAGES FOR NOTES.*



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PREFACE.

THIS little book is an attempt to convey some idea of the phenomena of the ordinary or single-phase alternating-current circuit to the minds of those new to the subject, by means of plainly worded and non-mathematical language.

The matter is, of course, a very important one to electrical students; and it also abounds in difficulties, many of which arise from the fact that authorities are by no means agreed as to the explanation of the various phenomena here dealt with.

In a work written from a practical or engineering standpoint, such as this is, it is almost absolutely necessary to look upon electricity as a something which flows along the conductor, as both explanation and comprehension are rendered much easier thereby. The student of advanced theories will consequently find little to interest him herein, except in a technical sense.

I have been greatly assisted by my friend Mr. C. H.

Yeaman (Chief Assistant Engineer at the Islington Electricity Works), in the preparation of this volume, and it is with great pleasure that I here acknowledge my indebtedness to him.

The book forms, in fact, the substance of a chapter in the forthcoming Vol. II. of my *Electric Lighting and Power Distribution*; it being thought expedient to publish it in advance, instead of delaying its appearance till the completion of the larger work.

Notwithstanding the smallness of the book, a very great amount of time and labour has been spent upon its evolution; with the result—it is hoped—that much additional information concerning alternating currents has been brought within the ken of the non-mathematical reader.

W. PERREN MAYCOCK.

‘MILBER,’ WADDON, SURREY.
April, 1897.



CONTENTS.

PART.	PAGE
1. THEORY OF ELECTRICITY	1
2. ALTERNATING CURRENT	2
3. ALTERNATING CURRENT (<i>continued</i>)	5
4. INDUCTANCE OR SELF-INDUCTION	9
5. ALTERNATING CURRENT (<i>continued</i>)	10
6. CAPACITY IN ALTERNATING-CURRENT CIRCUITS	13
7. CAPACITY IN ALTERNATING-CURRENT CIRCUITS (<i>continued</i>)	18
8. EFFECT OF CAPACITY IN THE CIRCUIT	21
9. INDUCTANCE, CAPACITY, ETC., IN A DIRECT-CURRENT CIRCUIT	24
10. INDUCTANCE, CAPACITY, ETC., IN AN ALTERNATING-CURRENT CIRCUIT	29
11. INDUCTANCE IN A CIRCUIT	34
12. EFFECTS OF AN ALTERNATING CURRENT AND OF INDUCTANCE AND CAPACITY ON THE INSULATION OF A CIRCUIT	35
13. ELECTRIFICATION OF CONDUCTOR DIELECTRIC	41
14. EXPERIMENTS ON INDUCTANCE	42
15. GRAPHICAL REPRESENTATION OF AN ALTERNATING CURRENT	47
16. FREQUENCY	55
17. FREQUENCY OF ALTERNATORS	56

PAR.	PAGE
18. VIRTUAL VOLTS AND AMPERES	57
19. AMPLITUDE AND PHASE	59
20. LAG AND LEAD	59
21. REACTANCE	63
22. REACTANCE AND IMPEDANCE	64
23. DIFFERENT ACTION OF RESISTANCE AND REACTANCE ON CURRENT. CHOKING COILS	65
24. PRACTICAL FORMS OF CHOKING COILS	68
25. USE OF CHOKING COILS	75
26. 'SKIN RESISTANCE' OR CONDUCTOR IMPEDANCE	76
27. CONDUCTORS FOR ALTERNATING CURRENTS	78
28. ELECTRICAL RESONANCE	80
29. EFFECTIVE VOLTS AND AMPERES	83
30. CONNECTION BETWEEN INDUCTANCE, REACTANCE, IMPEDANCE, IMPRESSED VOLTS, AND VIRTUAL CURRENT	84
31. POWER IN ALTERNATING-CURRENT CIRCUITS	89
32. POWER IN ALTERNATING-CURRENT CIRCUITS (<i>continued</i>)	93
33. CONCLUSION	96
INDEX	99
RULED PAGES FOR NOTES.	